Recombinant BST1 protein (His tag)

Catalog Number	547233
Synonyms	ADP-ribosyl cyclase 2; Bone marrow stromal cell antigen 1; BST-1; Cyclic ADP-ribose hydrolase 2; cADPR hydrolase 2; CD antigen CD157
Species	Human
Expression System	E. coli
Accession	Q10588
Molecular Weight	Predictes a molecular mass of 30.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	33-284
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 33-284 aa (Q10588) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This product is a high-quality recombinant protein fragment of human ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 2 (BST1), encompassing amino acids 33-284. It is designed to support structural and biochemical studies of this key enzyme involved in calcium signaling regulation. ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 2 (BST1) is a bifunctional enzyme that catalyzes both the synthesis of cyclic ADP-ribose (cADPR) from NAD+ and its hydrolysis to ADP-ribose (ADPR). cADPR functions as an endogenous second messenger that triggers calcium release from intracellular stores, thereby playing a crucial role in intracellular calcium mobilization. The enzyme may also contribute to pre-B-cell growth processes. In its native form, BST1 is localized to the cell membrane via a GPI-anchor, indicating its involvement in membrane-associated signaling pathways. The provided recombinant fragment represents a stable, soluble unit optimized for experimental applications.